

Corynebacterium callunae, *Corynebacterium herculis*, *Corynebacterium lilium*,
Corynebacterium melassecola, *Corynebacterium thermoaminogenes*, and
Corynebacterium ammoniagenes, comprising the following:

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- (i) a user input device that inputs nucleotide sequences information comprising SEQ ID NOs:1 to 3501, or amino acid sequences information comprising SEQ ID NOs:3502 to 7001, and target sequence or target structure motif information;
 - (ii) a data storage device for at least temporarily storing the input information;
 - (iii) a comparator that compares the nucleotide sequences information comprising SEQ ID NOs:1 to 3501 or the amino acid sequences information comprising SEQ ID NOs:3502 to 7001, with the target sequence or target structure motif information, recorded by the data storage device for screening and analyzing nucleotide sequence information which is coincident with or analogous to the target sequence or target structure motif information or for screening and analyzing amino acid sequence information which is coincident with or analogous to the target sequence or target structure motif information; and
 - (iv) an output device that shows a screening or analyzing result obtained by the comparator.

80. (Amended) A method based on a computer for identifying a target sequence or a target structure motif derived from a coryneform bacterium, which is optionally a microorganism of the genus *Corynebacterium*, the genus *Brevibacterium*, or the genus *Microbacterium*, and the microorganism belonging to the genus *Corynebacterium* is optionally selected from the group consisting of *Corynebacterium glutamicum*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium callunae*, *Corynebacterium herculis*, *Corynebacterium lilium*,

Corynebacterium melassecola, *Corynebacterium thermoaminogenes*, and *Corynebacterium ammoniagenes*, comprising the following:

(i) inputting nucleotide sequences information comprising SEQ ID NOs:1 to 3501, or amino acid sequences information comprising SEQ ID NOs:3502 to 7001, and the target sequence information or target structure motif information into a user input device;

(ii) at least temporarily storing said information;

(iii) comparing the nucleotide sequences information comprising SEQ ID NOs:1 to 3501 with the target sequence or target structure motif information, or the amino acid sequences information comprising SEQ ID NOs:3502 to 7001 with the target sequence or target structure motif information; and

(iv) screening and analyzing nucleotide sequence information which is coincident with or analogous to the target sequence or target structure motif information, or screening and analyzing amino acid sequence information which is coincident with or analogous to the target sequence or target structure motif information.

81. (Amended) A system based on a computer for determining a function of a polypeptide encoded by a polynucleotide having a target nucleotide sequence, or a polypeptide having a target amino acid sequence, derived from a coryneform bacterium, which is optionally a microorganism of the genus *Corynebacterium*, the genus *Brevibacterium*, or the genus *Microbacterium*, and the microorganism belonging to the genus *Corynebacterium* is optionally selected from the group consisting of *Corynebacterium glutamicum*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium callunae*, *Corynebacterium herculis*,

Corynebacterium lilium, *Corynebacterium melassecola*, *Corynebacterium thermoaminogenes*, and *Corynebacterium ammoniagenes*, comprising the following:

- (i) a user input device that inputs nucleotide sequences information comprising SEQ ID NOs:2 to 3501, function information of a polypeptide encoded by the nucleotide sequence, and target nucleotide sequence information, or amino acid sequences information comprising SEQ ID NOs:3502 to 7001, function information based on the amino acid sequence, and target amino acid sequence information;
- (ii) a data storage device for at least temporarily storing the input information;
- (iii) a comparator that compares the nucleotide sequences information comprising SEQ ID NOs:2 to 3501 with the target nucleotide sequence information for determining a function of a polypeptide encoded by a polynucleotide having the target nucleotide sequence which is coincident with or analogous to the polynucleotide having nucleotide sequences information comprising SEQ ID NOs:2 to 3501, or that compares the amino acid sequences information comprising SEQ ID NOs:3502 to 7001 with the target amino acid sequence information for determining a function of a polypeptide having the target amino acid sequence which is coincident with or analogous to the polypeptide having at least one amino acid sequence selected from SEQ ID NOs:3502 to 7001; and
- (iv) an output devices that shows a function obtained by the comparator.

82. (Amended) A method based on a computer for determining a function of a polypeptide encoded by a polypeptide encoded by a polynucleotide having a target nucleotide sequence derived from a coryneform bacterium, which is optionally a microorganism of the genus *Corynebacterium*, the genus *Brevibacterium*, or the genus *Microbacterium*, and the microorganism belonging to the genus *Corynebacterium* is

optionally selected from the group consisting of *Corynebacterium glutamicum*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium callunae*, *Corynebacterium herculis*, *Corynebacterium lilium*, *Corynebacterium melassecola*, *Corynebacterium thermoaminogenes*, and *Corynebacterium ammoniagenes*, comprising the following:

- B)
- (i) inputting nucleotide sequences information comprising SEQ ID NOs:2 to 3501, function information of a polypeptide encoded by the nucleotide sequence, and target nucleotide sequence information, or amino acid sequences information comprising SEQ ID NOs:3502 to 7001, function information based on the amino acid sequence, and target amino acid sequence information;
 - (ii) at least temporarily storing said information;
 - (iii) comparing the nucleotide sequences information comprising SEQ ID NOs:2 to 3501 with the target nucleotide sequence information, or comparing the amino acid sequences information comprising SEQ ID NOs:3502 to 7001 with the target amino acid sequence information; and
 - (iv) determining a function of a polypeptide encoded by a polynucleotide having the target nucleotide sequence which is coincident with or analogous to the polynucleotide having at least one nucleotide sequence selected from SEQ ID NOs:2 to 3501, or determining a function of a polypeptide having the target amino acid sequence which is coincident with or analogous to the polypeptide having at least one amino acid sequence selected from the SEQ ID NOs:3502 to 7001.

83. (Amended) A recording medium or storage device which is readable by a computer in which nucleotide sequences information comprising SEQ ID NOs:1 to 3501 or function information based on the nucleotide sequence is recorded, or amino acid